Notes on Some North American Skippers, with the Description of a New Species from Kansas (Lepidoptera: Hesperiidae)

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Urbanus undulatus (Hew.)

This species has been recorded from Mexico to southern Brasil and Paraguay, and also from Trinidad. The writer collected a specimen of this species at Tamazunchale, Mexico, during June and another one at Acapulco on the first of July, 1936.

On September 19, 1947, a female specimen of *undulatus* was collected off zinnias in a flower garden in Pharr, Texas. This individual appeared to be fresh, except that both tails were missing. This is the first record for this species in the United States.

Hesperia metea licinus (Edwards)

Pamphilia licinus Edwards, Trans. Amn. Ent. Soc. 3: 275, 1871, near Waco, Texas.
Hesperia horus Edwards, Trans. Amn. Ent. Soc. 3: 277, 1871, near Dallas, Texas.
Hesperia metea belfragei Freeman, Field and Laboratory, Vol. XII, No. 1, p. 20, Jan. 1944, Cedar Hill, Dallas Co., Texas.

For a number of years considerable confusion has existed concerning the status of *Pamphilia licinus* Edwards and *Hesperia horus* Edwards. Recently Dr. A. W. Lindsey [1] placed *Pamphilia licinus* Edwards as a synomym of *Hesperia metea* Scudder and stated "The type of *licinus* is a normal specimen of *metea*. The upper surface, illustrated by Holland, is less distinctive than the lower." With this in mind, the writer described as a new form *Hesperia metea belfragei,* from nine specimens collected at Cedar Hill, Dallas Co., Texas. This form is characterized by being larger, darker and having the maculation greatly re-

[1] Lindsey, A. W., A preliminary revision of Hesperia. Denison Univ. Bull., Jn. Sci. Lab., Vol. XXXVII, April, 1942, p. 16.

duced from typical *metea* Scudder. After corresponding with Dr. A. Avinoff and W. R. Sweader, at that time Assistant Curator, Carnegie Museum, the writer is fully convinced that *licinus* represents the Texas subspecies of *metea*. Dr. Sweadner stated in one of his letters: "I have examined the type of *Hesperia licinus* (Edw.). The ground color on both sides is a dull dark brown similar to the color in the genus *Prenes*. All of the spots are much reduced. The under side of the hind wing lacks the greenish sheen in the anal area that our specimens of *H. metea* have. The white spots around the end of the cell are reduced to minute dots. The band is less than half the width of that of *metea* and appears to be broken on vein 6. There is no whitish scaling on the veins." This description fits perfectly the insect named by the writer *metea belfragei* thus placing *belfragei* as a synomym of *licinus*. The drawing that Dr. Avinoff sent the writer verified Dr. Sweadner's statement.

For several years the writer has thought that *Hesperia horus* Edwards was the female of *Pamphilia licinus* Edwards and after carefully checking the original description and several sketches of the type at Cambridge there appears to be no doubt that this specimen is a female of Edwards' *licinus* and the writer's *belfragei*. Of the five females of this subspecies collected by the writer and his wife, two fit the original description and pictures of *horus* perfectly. In the other three the spots are present in a more or less definite degree. It is very easy to understand why so many lepidopterists have been confused with *horus* as two of my specimens show very little resemblance to the genus *Hesperia* much less to *metea*.

In the past twenty-two years the writer has never seen a typical specimen of *metea* from Texas or from any of the adjoining states. Two females were collected in Arkansas several years ago and one was sent to the late Dr. Eugene Murray-Aaron who in turn stated that it certainly looked like the unique type of *horus* Edwards. These two specimens were not quite as dark and immaculate as Texas examples. There exist in Georgia and the surrounding area specimens of *metea* that appear to be intermediate between typical *metea,* from the northeastern part of the United States, and *licinus* from Texas.

As *licinus* has page priority only over *horus* we will accept that name thus placing in synonymy *horus* Edwards and *belfragei* Freeman.

Atrytone eulogius Ploetz

This tropical American species has been recorded from Mexico to South America. Hoffmann [2] reports *eulogius* from Vera Cruz to the Yucatan peninsula and around Sinaloa in Mexico. The writer collected two males at Brownsville, Texas; one May 24, 1946, and the other Nov. 28, 1947. This is the first recorded evidence of this species in the United States.

Atrytonopsis turneri new species

♂. Upper surface, primaries, greyish-brown, with a variable number of white spots, ranging from seven, three subapical, two below these and two near the end of the cell, to immaculate.

Secondaries, greyish-brown, darker near the base, otherwise immaculate.

Under surface, primaries, dark grey with a lighter grey overscaling near the outer margin. The spots reappear and are somewhat better defined on this surface.

Secondaries, grey, with a lighter overscaling over most of the wing. Most specimens immaculate, whereas some may have one or two white spots near the base. A few specimens have a faint submesial row of spots.

Fringes are light, nearly white on both pairs of wings. Palpi sordid white. The body is dark grey above and lighter beneath.

Expanse.—28 mm.–35 mm., average 31 mm.

♀. Similar to the ♂, except that the spots are larger and the fringes somewhat darker.

Expanse.—32 mm.–38 mm., average 34 mm.

Described from 47 specimens, 29 ♂♂, and 18 ♀♀, from Barber Co., and Caldwell, KANSAS; Freedom, OKLAHOMA. Collected by Dr. and Mrs. R. C. Turner, Dr. J. R. Turner, and Mr. and Mrs. Don B. Stallings, during April and May 1945–46.

[2] HOFFMANN, C. C., Catalogo sistematico y zoogeografico de los Lepidopteros Mexicanos. Segunda parte. Hesperioidea. Anal. Inst. de Biol., Mexico, D. F., Tomo XII, No. 1, p. 276, 1941.

This new species is named in honor of Dr. R. C. Turner, who collected a large number of the type series of this undescribed species.

Holotype ♂, Barber Co., Kansas, May 5, 1946, *allotype* ♀, Barber Co., Kansas, April 28, 1946, will be placed in the American Museum of Natural History; 1 pair of *paratypes* will be placed in the following museums: Academy of Natural Sciences Philadelphia and United States National Museum; 2 pairs are in the collection of Mr. Otto Buchholz; 15 ♂♂, and 7 ♀♀ are in the collection of Stallings and Turner and the remaining 9 ♂♂ and 6 ♀♀ are in the collection of the author.

This new species appears to be related to *hianna* Scud. and *deva* (Edw.). The general coloration and maculation are very much like that of *deva,* but it differs from that species in its smaller size. *Turneri* differs from *hianna* in being grey instead of brown and there is more of an even grey coloration on the under surface of the secondaries than is present in *hianna.* The submesial row of spots in *turneri* is greatly reduced from that of *hianna.* The fringes and palpi are also lighter in *turneri* than they are in *hianna.*

✓ **Cobalus percosius** G. & S.

Hoffmann states on page 276 of his Hesperioidea that *percosius* occurs in Mexico in the vicinity of Vera Cruz. On November 28, 1947, the writer caught a ♂ specimen of this species in Brownsville, Texas. While on a collecting trip with Mr. Otto Buchholz between Brownsville and Southmost, Texas, April 4, 1948, we caught 40 specimens of this species, 35 ♂♂, and 5 ♀♀. Three days later (April 7, 1948) Otto Buchholz went back to this spot again and caught 7 ♂♂, and 3 ♀♀, making a total of 50 specimens collected in a three-day period. This species is native to that particular habitat and the specimens were collected off thistles and evening primroses.

This establishes another new skipper record for our North American list, as previously no members of the genus *Cobalus* have been recorded from the United States.